

ESR study of the undoped heavy-fermion compound YbRh₂Si₂

Ivanshin V., Zverev D.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The electron spin resonance (ESR) of the heavy-fermion metal YbRh₂Si₂ has been studied. The angular variation and the temperature dependence of the ESR line width have been measured in YbRh₂Si₂ single crystals in the temperature range of 4-25 K. The characteristic spin-fluctuation temperature $T^* \sim 17$ K estimated from these studies coincides very well with other experimental data. A well-behaved ESR signal due to local Yb³⁺ moments strongly supports the localized moment scenario for heavy-fermion quantum critical points.
